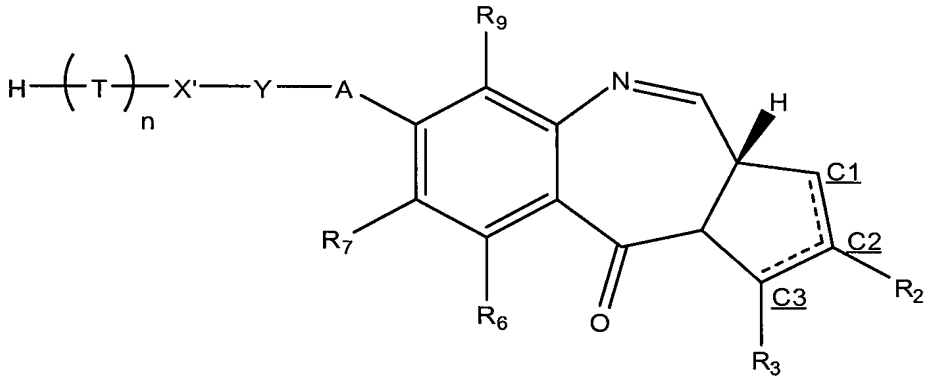
Listing of Claims

1-38. Cancelled

39. (Currently amended) A collection of compounds all of which are represented by formula II:



(II)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit; and

~~and~~ n is a positive integer from 1 to 16.

40. (Previously presented) A collection of compounds according to claim 39 wherein R and HY are independently selected from lower alkyl group having 1 to 10 carbon

atoms, or an aralkyl group, of up to 12 carbon atoms, or an aryl group, of up to 12 carbon atoms, optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

41. (Previously presented) A collection of compounds according to claim 39, wherein R and HY are independently selected from lower alkyl groups having 1 to 10 carbon atoms optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

42. (Previously presented) A collection of compounds according to claim 39, wherein R or HY are independently selected from unsubstituted straight or branched chain alkyl groups, having 1 to 10 carbon atoms.

43. (Previously presented) A collection of compounds according to claim 39 wherein R_7 is an electron donating group.

44. (Previously presented) A collection of compounds according to claim 39 wherein R_6 and R_9 are H.

45. (Previously presented) A collection of compounds according to claim 39, wherein R_2 and R_3 of are H.

46. (Previously presented) A collection of compounds according to claim 45, wherein R_7 is an alkoxy group.

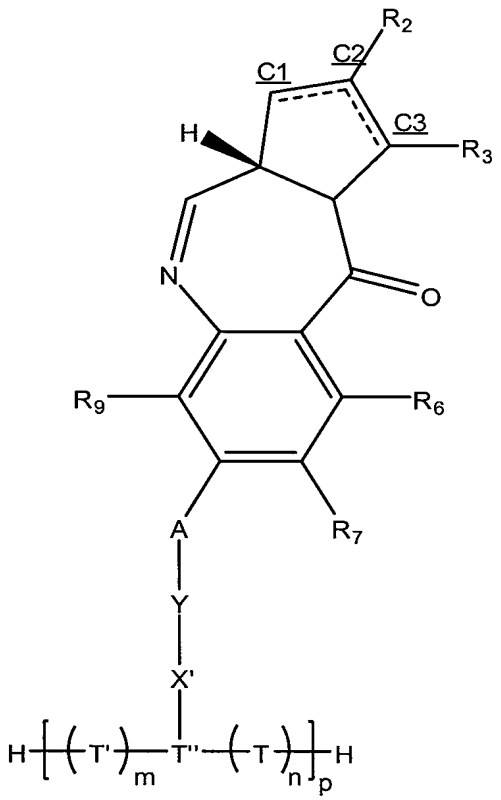
47. (Previously presented) A collection of compounds according to claim 39 wherein there is no double bond between C2 and C3.

48. (Previously presented) A collection of compounds according to claim 39, wherein -Y-A- is an alkoxy chain.

49. (Previously presented) A collection of compounds according to claim 39, wherein X' is either CO or NH.

50. Cancelled.

51. (Currently amended) A collection of compounds all of which are represented by formula VIII:



(VIII)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

n is a positive integer from 1 to 16;

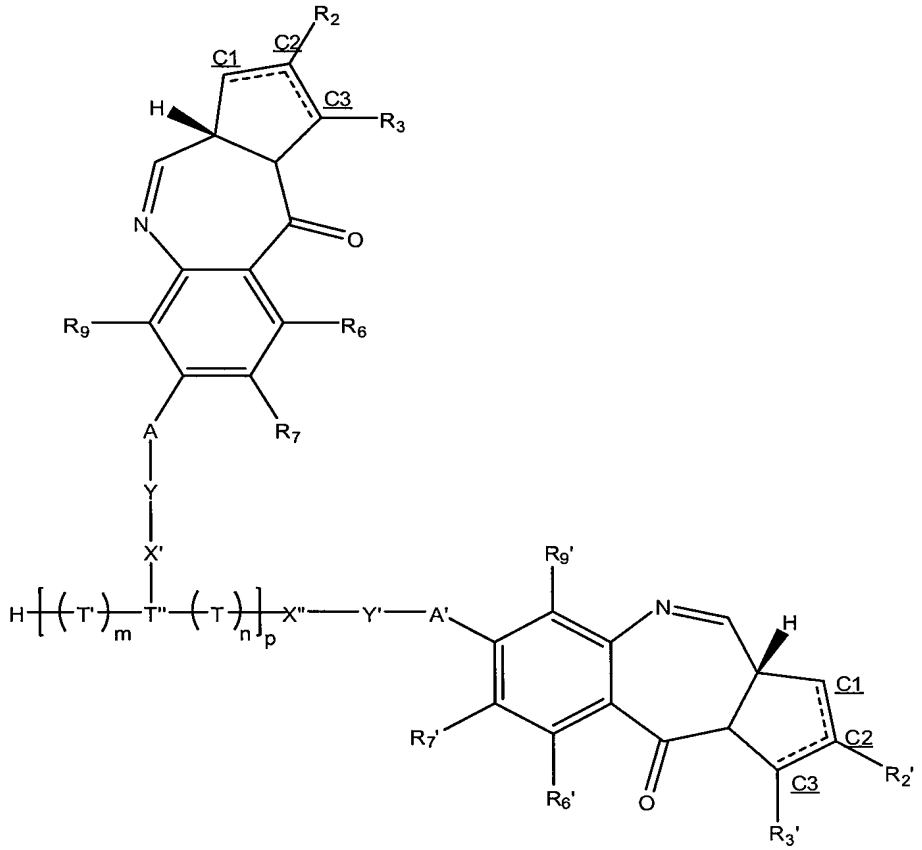
m is a positive integer from 1 to 16;

T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is a positive integer from 1 to 16, where if p is greater than 1, for each repeating unit the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and values of n and m are independently selected.

52. (Currently amended) A collection of compounds all of which are represented by formula XII:



(XII)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

n is a positive integer from 1 to 16;

m is a positive integer from 1 to 16;

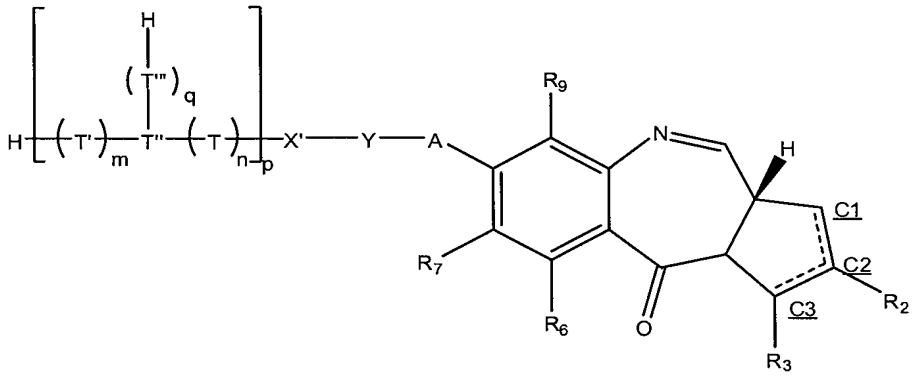
T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is a positive integer from 1 to 16, where if p is greater than 1, for each repeating unit the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and values of n and m are independently selected; and

X", Y', A', R'_7, R'_2, R'_3, R'_6, R'_9 are selected from the same possibilities as X', Y, A, R_7, R_2, R_3, R_6, and R_9 respectively.

53. (Currently amended) A collection of compounds all of which are represented by formula XVI:



(XVI)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

n is a positive integer from 1 to 16;

m is a positive integer from 1 to 16;

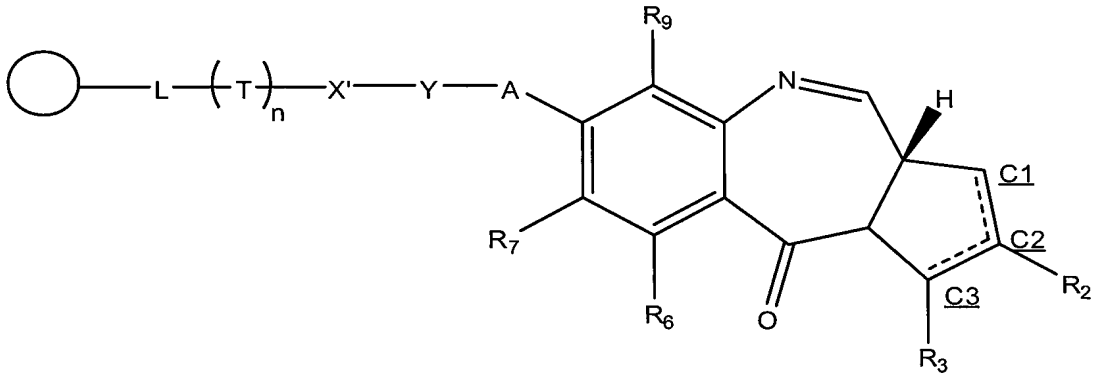
T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is a positive integer from 1 to 16, where if p is greater than 1, for each repeating unit the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and values of n and m are independently selected; and

T"' and q are selected from the same possibilities as T and n respectively, and where if p is greater than 1, the meanings of T, T', T", T"' and values of n, m and q may be independently selected.

54. (Currently amended) A collection of compounds all of which are represented by formula III:



(III)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

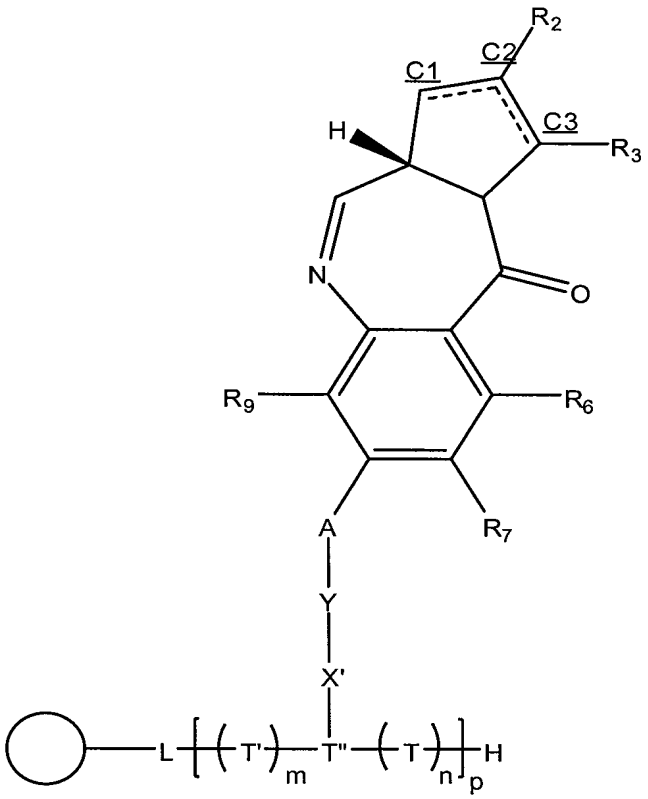
T is ~~a~~ an amino acid residue combinatorial unit;

n is a positive integer from 1 to 16;

L is a linking group, or a single bond; and

⊙ is a solid support.

55. (Currently amended) A collection of compounds all of which are represented by formula VI:



(VI)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

L is a linking group, or a single bond;

⊙ is a solid support;

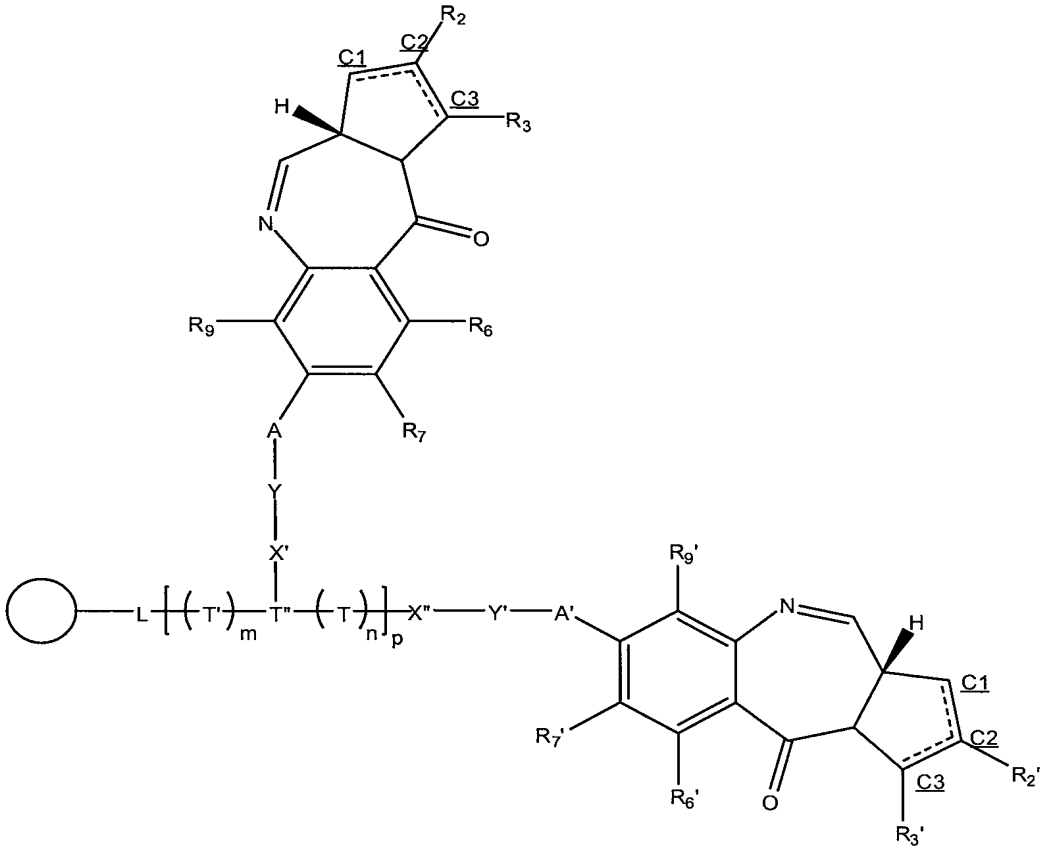
n and m are positive integers from 1 to 16, or one of them may be zero;

T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is ~~a~~ an amino acid residue combinatorial unit which provides a site for the attachment of X'; and

p is a positive integer from 1 to 16, where if p is greater than 1, for each repeating unit, the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and the values of n and m are independently selected.

56. (Currently amended) A collection of compounds all of which are represented by formula X:



(X)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

L is a linking group, or a single bond;

⊙ is a solid support;

n and m are positive integers from 1 to 16, or one of them may be zero;

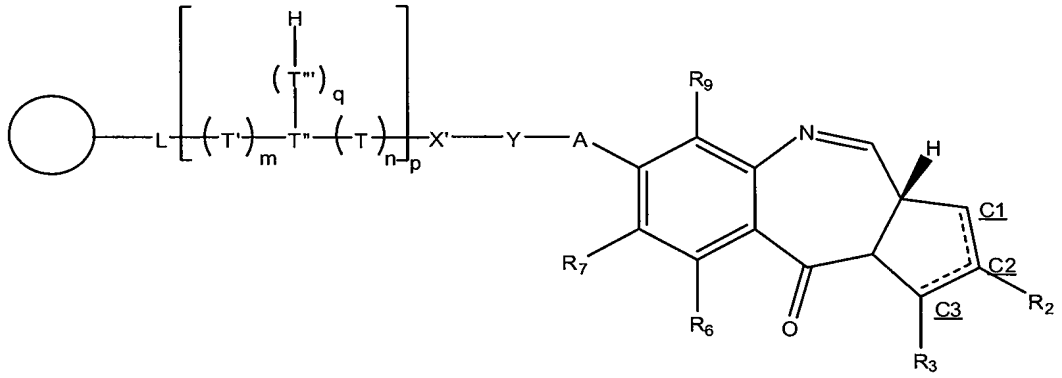
T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is ~~a~~ an amino acid combinatorial unit which provides a site for the attachment of X';

p is a positive integer from 1 to 16, where if p is greater than 1, for each repeating unit, the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and the values of n and m are independently selected; and

X", Y', A', R'_2, R'_3, R'_6, R'_7 and R'_9 are selected from the same possibilities as X', Y, A, R_2, R_3, R_6, R_7 and R_9.

57. (Currently amended) A collection of compounds all of which are represented by formula XIV:



(XIV)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

L is a linking group, or a single bond;

⊙ is a solid support;

n and m are positive integers from 1 to 16, or one of them may be zero;

T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

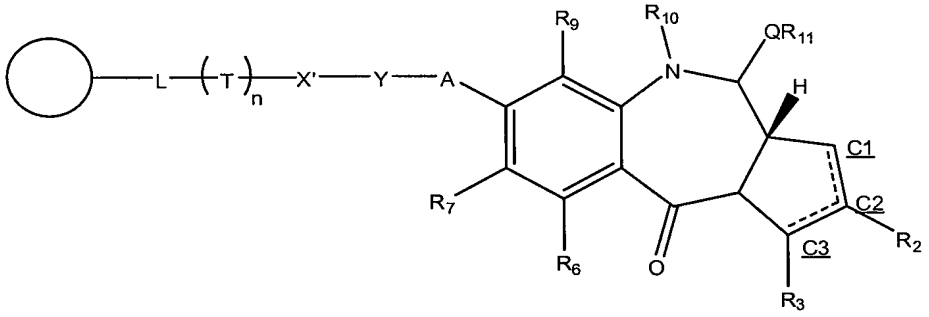
T'' is ~~a~~ an amino acid residue combinatorial unit which provides a site for the attachment of X';

p is a positive integer from 1 to 16, where if p is greater than 1, for each repeating unit, the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T'' and the values of n and m are

independently selected; and

T''' and q are selected from the same possibilities as T and n respectively, and where if p is greater than 1, for each repeating unit the meaning of T, T', T'', T''' and the values of n, m and q may be independently selected.

58. (Currently amended) A collection of compounds all of which are represented by formula IV:



(IV)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

L is a linking group, or a single bond;

⊙ is a solid support;

n is a positive integer from 1 to 16;

R_{11} is either H or R;

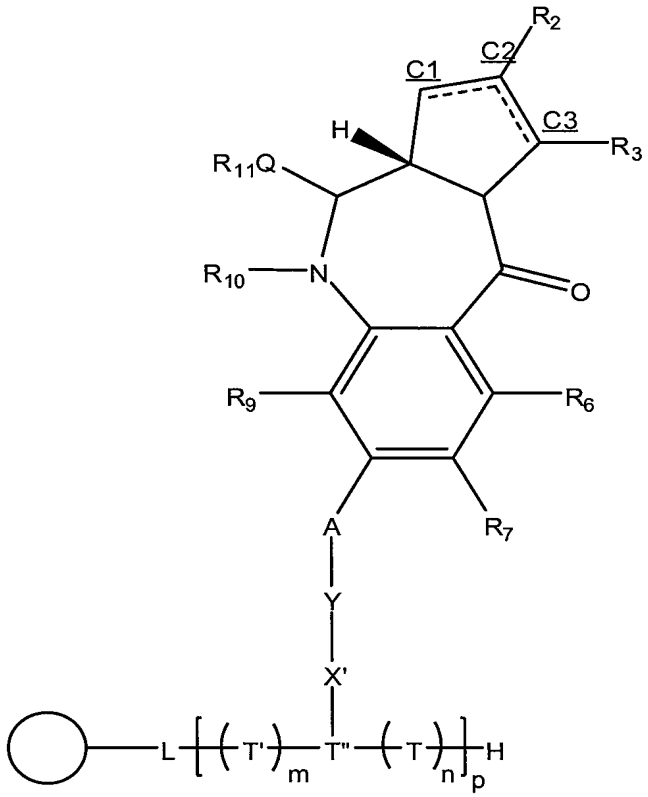
Q is S, O or NH; and

R_{10} is a nitrogen protecting group.

59. (Previously presented) A collection of compounds according to claim 58, wherein R_{10} has a carbamate functionality where it binds to the nitrogen atom at the 10 position of a PBD ring structure.

60. (Previously presented) A collection of compounds according to claim 58, wherein Q is O, and/or R_{11} is H.

61. (Currently amended) A collection of compounds all of which are represented by formula VII:



(VII)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

L is a linking group, or a single bond;

⊙ is a solid support;

n and m are positive integers from 1 to 16, or one of them may be zero;

T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is ~~a~~ an amino acid residue combinatorial unit which provides a site for the attachment of X';

p is a positive integer from 1 to 16;

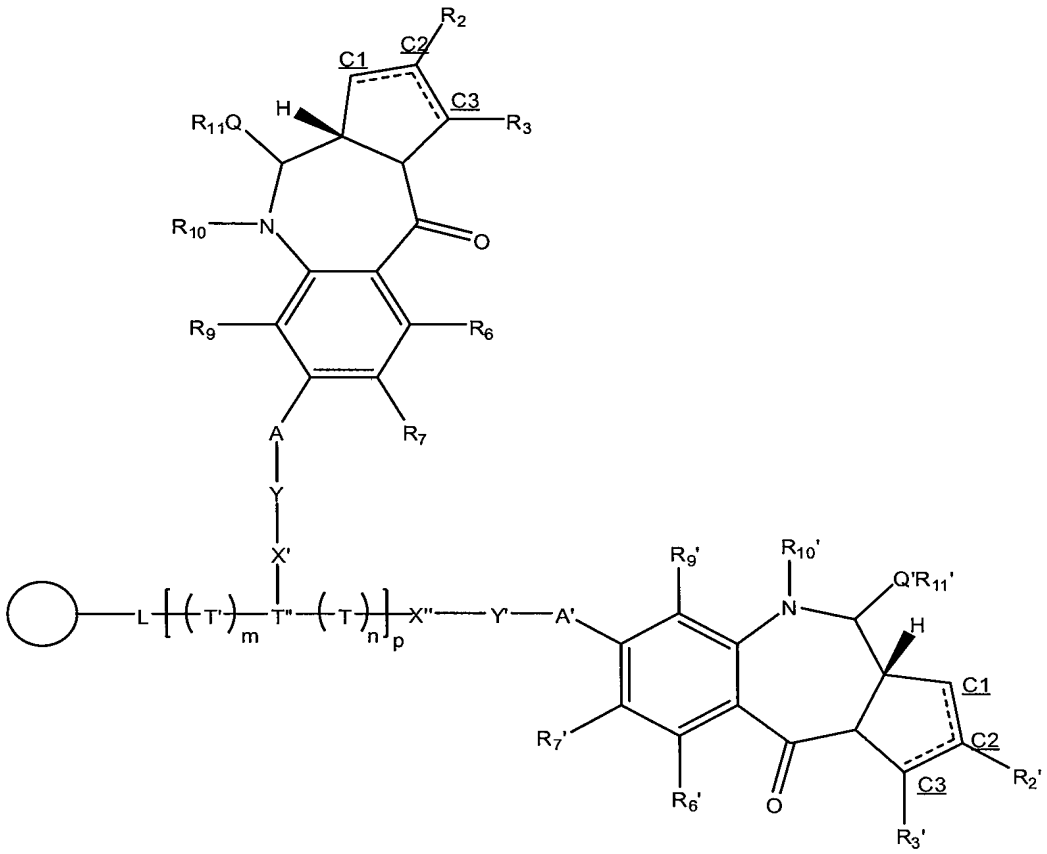
R_{11} is either H or R;

Q is S, O or NH;

R_{10} is a nitrogen protecting group; and

where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T",Q, R_{10}, R_{11} and the values of n and m are independently selected.

62. (Currently amended) A collection of compounds all of which are represented by formula XI:



(XI)

wherein:

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

L is a linking group, or a single bond;

⊙ is a solid support;

n and m are positive integers from 1 to 16, or one of them may be zero;

T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is ~~a~~ an amino acid residue combinatorial unit which provides a site for the attachment of X';

p is a positive integer from 1 to 16;

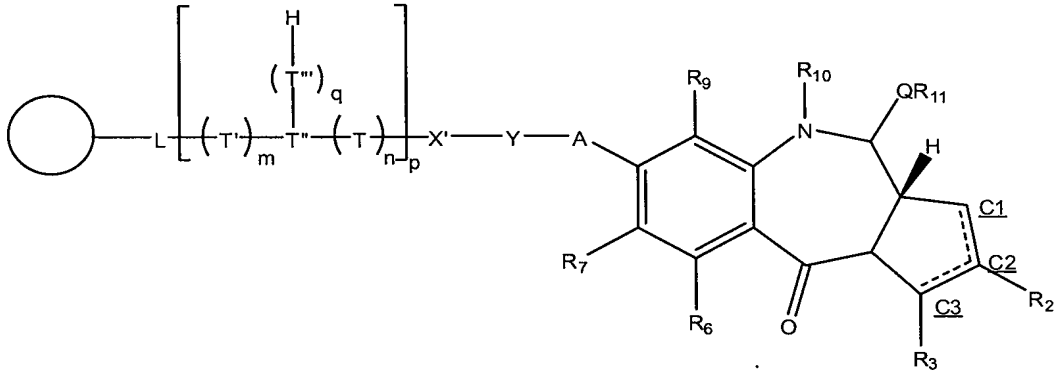
R_{11} is either H or R;

Q is S, O or NH;

R_{10} is a nitrogen protecting group; and

Q', R'_{10}, R'_{11}, have the same definitions as Q, R_{10}, R_{11}, respectively, and where if p is greater than 1, for each repeating unit the meanings of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T",Q, R_{10}, R_{11} and the values of n and m are independently selected.

63. (Currently amended) A collection of compounds all of which are represented by ~~the~~ formula XV:



(XV)

A is O, S, NH, or a single bond;

R_2 and R_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3;

R_6, R_7, and R_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

where R is an alkyl group having 1 to 10 carbon atoms, or an aralkyl group, of up to 12 carbon atoms, whereof the alkyl group optionally contains one or more carbon-carbon double or triple bonds, which may form part of a conjugated system, or an aryl group, of up to 12 carbon atoms; and is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms which may form part of, or be, a functional group;

Y is a divalent group such that HY = R;

X' is CO, NH, S or O;

T is ~~a~~ an amino acid residue combinatorial unit;

L is a linking group, or a single bond;

⊙ is a solid support;

n and m are positive integers from 1 to 16, or one of them may be zero;

T' is ~~a~~ an amino acid residue combinatorial unit, where each T' may be different if m is greater than 1;

T" is ~~a~~ an amino acid residue combinatorial unit which provides a site for the attachment of X';

p is a positive integer from 1 to 16, where if p is greater than 1, for each repeating unit, the meaning of X', Y, A, R_2, R_3, R_6, R_7, R_9, T, T', T" and the values of n and m are independently selected;

T"' and q are selected from the same possibilities as T and n respectively, and where if p is greater than 1, for each repeating unit the meaning of T, T', T", T"' and the values of n, m and q may be independently selected;

R_{11} is either H or R;

Q is S, O or NH;

R_{10} is a nitrogen protecting group;

64. (Currently amended) A method of screening the collection of compounds of claim 39 to discover compounds with a specific biological activity comprising contacting a target macromolecule, target molecule or cell with the collection of compounds of claim 39 and selecting the compounds which show an effect.